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WHAT IS CLAIMED IS:

- 1. A temporary wet strength resin comprising a polymer backbone comprising a cocrosslinking monomeric unit, a homo-crosslinking monomeric unit and a cationic monomeric unit.
- 2. The temporary wet strength resin according to Claim 1 wherein the temporary wet strength resin has the following formula:

$$\frac{A}{Y_1}$$
 $\frac{W}{a}$ $\frac{Z}{Y_2}$ $\frac{Z}{b}$ $\frac{Z}{Y_3}$ $\frac{Z}{c}$ $\frac{Q}{d}$ $\frac{Z}{d}$

wherein: A is:

Z is:

$$\begin{array}{c} O \\ II \\ -C-X-(R_2)-OH \end{array}$$
 or $-OH$

and X is -O, -NH, or $-NCH_3$, and R_1 and R_2 are substituted or unsubstituted aliphatic groups: Y_1 , Y_2 , and Y_3 are independently -H, $-CH_3$, or a halogen; W is a non-nucleophilic, water-soluble nitrogen heterocyclic moiety or a tertiary amide, and Q is a cationic monomeric unit, wherein the mole percent of a is from about 1 % to about 47 %, the mole percent of b is from about 0 % to about 70 %, the mole percent of c is from about 10 % to about 90 %, and the mole percent of d is from about 1 % to about 40 %; and said temporary wet strength resin has a weight average molecular weight of at least about 20,000.

3. The temporary wet strength resin according to Claim 2 wherein said weight average molecular weight of from about 20,000 to about 400,000.

- 4. The temporary wet strength resin according to Claim 2 wherein a is from about 5 % to about 30 %, b is from 0 % to about 60 %, c is about 30 % to about 80 %, and d is about 2 % to about 20 %.
- 5. The temporary wet strength resin according to Claim 2 wherein A is

and R₁ comprises a C₂-C₇ aliphatic chain.

6. The temporary wet strength resin according to Claim 2 wherein Z is

$$-C-X-(R_2)-OH$$

and R₂ is a C₂-C₄ aliphatic chain.

- 7. The temporary wet strength resin according to Claim 6 wherein Z is selected from the group consisting of 2-hydroxyethyl acrylate, 2-hydroxyethyl methacrylate, 4-hydroxybutyl acrylate, glyceryl mono-methacrylate, glyceryl mono-acrylate, 2-hydroxypropyl acrylate 2-hydroxypropyl methacrylate, hydroxypropyl acrylate 4-hydroxybutyl methacrylate, diethylene glycol mono-methacrylate, sorbitol methacrylate, methyl 2-hydroxymethyl acrylate, 3-methyl butanol-2 methacrylate, 3,3-dimethyl butanol-2 methacrylate, ethyl 2-(hydroxymethyl)acrylate, N-2-hydroxyethyl methacrylamide, N-(2-hydroxypropyl) methacrylamide, 2-acrylamidoglycolic acid, and acrylamidotrishydroxymethylmethane.
- 8. The temporary wet strength resin according to Claim 2 wherein W is selected from the group consisting of vinyl pyrrolidones, vinyl oxazolidones, vinyl imidazoles, vinyl imidazoles, N,N-dialkyl acrylamides, alkyl acrylates, and alkyl methacrylates.
- 9. The temporary wet strength resin according to Claim 2, wherein W is a vinyl pyrrolidinone, Z is 2-hydroxyethyl acrylate, and A is selected from N-(2,2-dimethoxyethyl)-N-methyl acrylamide, acrolein, methacrolein, 3,3-dimethyoxypropyl acrylamide, 3,3 diethoxypropyl

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acrylamide, 3,3-dimethoxypropyl methacrylamide, 2,2 dimethoxy-1-methylethyl acrylate,3,3-dimethoxypropyl methacrylate, 2-(acryloylamino)ethanal dimethylacetal, 2-(methacryloylamino)propanal dimethyl acetal, 5-(acryloylamino)pentanal dimethylacetal, 8-(acryloylamino)octanal dimethylacetal, and 3-(N-acryloyl-N-methylamino)propanal dimethylacetal.

- 10. A fibrous structure comprising a temporary wet strength resin comprising a polymer backbone comprising a co-crosslinking monomeric unit, a homo-crosslinking monomeric unit and a cationic monomeric unit.
- 11. The fibrous structure according to Claim 10 wherein the temporary wet strength resin has the following formula:

$$A$$
 Y_1
 A
 Y_2
 Y_3
 Y_3
 Y_4
 Y_3
 Y_4
 Y_4
 Y_4
 Y_5
 $Y_$

wherein: A is:

Z is:

$$\overset{\text{O}}{-\text{C}}$$
 $\overset{\text{II}}{-\text{C}}$ $-\text{CH}$ or $-\text{OH}$

and X is -O-, -NH-, or -NCH₃-, and R₁ and R₂ are substituted or unsubstituted aliphatic groups: Y₁, Y₂, and Y₃ are independently -H, -CH₃, or a halogen; W is a non-nucleophilic, water-soluble nitrogen heterocyclic moiety or a tertiary amide, and Q is a cationic monomeric unit, wherein the mole percent of a is from about 1 % to about 47 %, the mole percent of b is from about 0 % to about 70 %, the mole percent of c is from about 10 % to about 90 %, and the mole percent of d is from about 1 % to about 40 %; and said temporary wet strength resin has a weight average molecular weight of at least about 20,000.

12. The fibrous structure according to Claim 10 wherein the fibrous structure comprises from about 0.005 % to about 5% by weight of the fibrous structure of the temporary wet strength resin.

- 13. A single- or multi-ply sanitary tissue product comprising a fibrous structure according to Claim 10.
- 14. A surgical garment comprising a fibrous structure according to Claim 10.
- 15. A process for making a fibrous structure comprising the steps of:
 - a) providing a fiber furnish;
 - b) depositing the fibrous furnish on a foraminous forming surface to form an embryonic fibrous web;
 - c) drying the embryonic fibrous web such that the fibrous structure is formed; and
 - d) applying a temporary wet strength resin comprising a polymer backbone comprising a co-crosslinking monomeric unit, a homo-crosslinking monomeric unit and a cationic monomeric unit to the fiber furnish and/or the embryonic fibrous web and/or the fibrous structure.
- 16. A process for making a sanitary tissue product comprising the steps of:
 - a) providing a fibrous structure in accordance with Claim 10; and
 - b) converting the fibrous structure into a sanitary tissue product.
- 17. A method for making a temporary wet strength resin comprising the steps of:
 - a) providing a co-crosslinking monomeric unit; a homo-crosslinking monomeric unit and a cationic monomeric unit; and
 - b) polymerizing the monomeric units from a) to form a temporary wet strength resin.
- 18. A fibrous structure comprising a temporary wet strength resin comprising a polymer backbone comprising a co-crosslinking monomeric unit; a homo-crosslinking monomeric unit and a cationic monomeric unit, wherein the fibrous structure exhibits a % Total Wet Tensile Loss (Decay) after 5 minutes of soaking in neutral pH water of at least about 35% and/or a % Total Wet Tensile Loss (Decay) after 30 minutes of soaking in neutral pH water of at least about 65% and/or an initial wet tensile strength/dry tensile strength ratio (WT_i/DT) of at least about 7.